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7	Campbell v. Acuff-Rose Music, Inc. 510 U.S. 569 (1994)
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8 9	Wall Data Inc. v. Los Angeles Cty. Sheriff 447 F.3d 769 (9th Cir. 2006)
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This is the third time that Oracle has argued that no reasonable jury could find Google's use of the declarations/SSO for the 37 API packages from Java SE was a fair use. Once again, Oracle is wrong. Oracle's most recent request for judgment as a matter of law defies: (1) the Federal Circuit's holding that Google's fair use defense needed to be retried to a jury, *Oracle Am. v. Google Inc.*, 750 F.3d 1339 (Fed. Circ. 2014); (2) the judgment of the jury that found for Google; and (3) this Court's order denying Oracle's Rule 50(a) motion. Dkt. 1988. The fair use inquiry is fact intensive, and this trial called for the jury to weigh competing evidence and assess the credibility of many witnesses. As the Court has concluded, "all reasonable balancings of the statutory factors" do not favor Oracle's side only. Dkt. 1988 at 1.

Google offered more than sufficient evidence for the jury to find in its favor on fair use. First, Android is highly transformative. It was and is an unprecedented, open-source, full-stack mobile operating system designed for smartphones. This was an entirely new use for the Java SE declarations/SSO at issue, given that the Java SE platform was designed for use in desktops and servers. Moreover, the top decision-makers at both Sun and Google, including the then-CEO of Sun and all of Google's leading executives involved in Android, testified that they understood the declarations/SSO of the 37 Java API packages could be freely used, affirming Google's good faith. Second, Google provided significant evidence that the declarations/SSO are predominantly functional, rather than creative. Third, the jury heard evidence that Google used only what was necessary to transform the declarations/SSO of the 37 Java API packages at issue into a full-stack mobile operating system, an extremely limited use. Fourth, Google presented substantial evidence that its actions were consistent with Sun's business practices, and that Android is not a substitute for either Java SE or Java ME and does not harm or threaten to harm any valid "potential market" for Java SE, the copyrighted work. Finally, other factors, such as the transformation of the mobile industry and Oracle's admission that the use of at least some of the declarations was a fair use, could properly be considered in finding for Google. Accordingly, the Court should again deny Oracle's motion for judgment as a matter of law.

#### I. FAIR USE IS A FACT-INTENSIVE INQUIRY

"A district court may set aside a jury verdict and grant judgment as a matter of law only if,

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27 28 under the governing law, there can be but one reasonable conclusion as to the verdict." Settlegoode v. Portland Pub. Sch., 371 F.3d 503, 510 (9th Cir. 2004) (quotation marks omitted). The burden is high for any party seeking to upset a jury's verdict, and it is especially high here because of the fact-intensive nature of the fair use inquiry. Fair use is an equitable rule of reason; "there are no bright-line rules and each case raising the fair use question must be decided on its own facts." Worldwide Church of God v. Phila. Church of God, Inc., 227 F.3d 1110, 1122 (9th Cir. 2000) (alterations and quotation marks omitted); see also Dkt. 1981 ¶ 21. Indeed, the Federal Circuit has already concluded that it could not determine the facts as to any of the four factors as a matter of law. *Oracle Am.*, 750 F.3d at 1376-77.

Oracle acknowledges that its motion can be decided only on the basis of "admitted and undisputed facts," Mot. at 1, but then relies on one highly disputed assertion after another regarding, for example, the suitability of Java SE or ME for modern smartphones, whether Google used the declarations/SSO of 37 API packages in good faith, and the degree of creativity in the portion of the copyrighted work used. Google vigorously contested Oracle's purported "facts" on all these points and many more. Moreover, the jury heard the testimony of numerous witnesses; the "trial presented a series of credibility calls for our jury" and witness credibility "was much challenged." Dkt. 1988 at 1, 19. "Credibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge." Reeves v. Sanderson Plumbing Prods., Inc., 530 U.S. 133, 150 (2000).

In light of the fact-specific inquiry required to determine fair use and the volume and complexity of the evidence before the jury, Google's fair use defense is not amenable to resolution as a matter of law. "Many variations and balancings could have reasonably led to the same verdict." Dkt. 1988 at 19. The jury's verdict therefore must stand.

#### II. A REASONABLE JURY COULD FIND THAT THE PURPOSE AND CHARACTER OF GOOGLE'S USE OF THE 37 JAVA SE API PACKAGES IN ANDROID FAVORS FAIR USE.

The first factor of the fair use test requires an examination of the "purpose and character" of the use. 17 U.S.C. §107(1). Courts have established a two-part inquiry for this factor: (1) whether and to what extent the new work is transformative; and (2) whether the use serves a

commercial purpose. *Oracle Am.*, 750 F.3d at 1374 (citations omitted).

#### A. Google's use of the 37 Java SE API packages was highly transformative.

Google put forth extensive evidence to support a finding that its use of the declarations/SSO of the 37 Java API packages was transformative, and that the transformative nature of Android outweighs the commercial aspects of the use.

#### 1. Commercial use does not negate fair use.

First, a finding that a use is commercial does not necessitate a finding that it is not fair. 
Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 584 (1994). As the Court has held, "our jury could reasonably have found that Google's use of the declaring code and SSO from 37 Java API packages constituted a fair use despite even a heavily commercial character of that use." Dkt. 1988 at 12. Indeed, the Federal Circuit remanded this case for re-trial, despite finding that Google's use of the asserted works was commercial. Oracle Am., 750 F.3d at 1376.

Accordingly, Oracle is wrong to suggest that revenue above a certain dollar amount precludes a finding of fair use. Mot. at 1-2. The Supreme Court has rejected the position that "commerciality" carries "presumptive force against a finding of fairness." Campbell, 510 U.S. at 584. Courts are "free to consider the public benefit resulting from a particular use notwithstanding the fact that the alleged infringer may gain commercially." Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510, 1523 (9th Cir. 1992), as amended (Jan. 6, 1993). In short, the jury reasonably could have found "that the evidence showed the use was entirely commercial" and "yet still ruled for Google." Dkt. 1988 at 13.

Second, as this Court also recognized, the jury reasonably could have found that Google's use was *not* entirely commercial. The jury could have found that when Google made Android source code freely available, it served non-commercial purposes, *e.g.* "the general interest in sharing software innovation," which Google promoted via a "free and open software platform." *Id.* at 12, 13. The jury could have found this non-commercial interest to be significant,

Oracle argues that the first factor weighs against Google because the manner in which Google used the Java SE APIs does not fit any of the examples enumerated in the copyright statute. Mot. at 3. This is incorrect as a matter of law, *see Campbell*, 510 U.S. at 584, and at the charging conference, Oracle conceded that the statutory factors are not limiting. Tr. 1986:14-16.

notwithstanding the amount of Android-related revenues. *See* Mot. at 1-2. In other words, the "jury could reasonably have found the open-source character of Android tempered Google's overall commercial goals." Dkt. 1988 at 12.

Third, the jury may have determined that there was not a sufficient connection between Android-related revenues and the declarations/SSO. These revenues predominantly arise from Google's pre-existing search and ad technologies, not from Android. *See* Mot. at 1-2 (citing testimony of E. Schmidt). Even Oracle's economic expert, Dr. Adam Jaffe, testified that Google's search and ad technology are separate from Android. Tr. 1867:3-1868:25. Oracle's citations to cases involving revenues "far lower" than "billions" are thus inapposite, because those cases involve revenues actually derived from use of the copyrighted work, rather than from unrelated technology or products. *See* Mot. at 2.

In sum, the evidence of commerciality that Oracle cites does not preclude a reasonable jury from finding fair use.

### 2. Google transformed the declarations/SSO of the Java SE API packages into a new creation: Android.

The Supreme Court instructs that "the more transformative the new work, the less will be the significance of other factors like commercialism, that may weigh against a finding of fair use." *Campbell*, 510 U.S. at 579. That is because "the goal of copyright, to promote science and the arts, is generally furthered by the creation of transformative works." *Id.* (citations omitted). A use is "transformative" if it "adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message." *Id.* 

As this Court has held, Oracle's repeated insistence that Google "created exact copies of the declaring code and SSO" is unavailing. Mot. at 5-6. "[T]he words copied will always be the same (or virtually so) in a copyright case — otherwise there can be no copyright problem in the first place." Dkt. 1988 at 14; *see also Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1165 (9th Cir. 2007) ("[E]ven making an exact copy of a work may be transformative so long as the copy serves a different function than the original work."); *accord* ECF 1928 at 13 (Court's final jury charge). But "[i]f this were enough to defeat fair use, it would be impossible ever to

duplicate declaring code as fair use and presumably the Federal Circuit would have disallowed this factor on the first appeal rather than remanding for a jury trial." *Id*.

Google presented substantial evidence showing its use was not mere "verbatim" copying. On this evidence, the jury could have found that Google's use "constituted a fresh context giving new expression, meaning, or message" to the declarations/SSO. Dkt. 1988 at 14. As this Court explained, the jury could have reasonably found that Google selected 37 out of 166 Java SE API packages, used the declarations with "new implementing code adapted to the constrained operating environment of mobile smartphone devices with small batteries," and added "brand new methods, classes, and packages written by Google for the mobile smartphone platform." *Id.*; *see also id.* at 18. Google sets forth below some of the extensive evidence introduced at trial that could have supported a jury finding that Google's use was highly transformative.

#### a. Android was different from anything seen before.

Prior to Android, there was no open-source platform tailored for smartphones available on the market. Tr. 623:2-21 (Rubin). Android chief Andy Rubin testified that there had been little innovation in the mobile phone space prior to Android. It was "really, really hard to build a phone" because there "was a whole ecosystem of software developers" and an OEM would "have to aggregate all these different pieces, like pieces of a puzzle. And they would have to build a video player from one company, and an operating system from another company, and the user interface from a third company." *Id.*; *see also* Tr. 347:14-348:7 (E. Schmidt). The result "just wasn't a good user experience." Tr. 623:2-21 (Rubin). Google CEO Larry Page testified that Google was frustrated with the state of mobile phones. Tr. 1842:20-1843:3

Java SE was not a solution to the challenges of creating a smartphone platform. As Dr. Astrachan explained, Java SE was designed for servers and desktop computers, and, for instance, using all 166 API packages from Java SE would not be appropriate for a mobile platform. Tr. 1935:6-19 (Astrachan). As an example of the problem, Dr. Astrachan pointed to the failed SavaJe phone, which he testified missed a key step in not selectively using only certain API packages. *Id.* Indeed, Sun was never able to create a smartphone (or a smartphone operating system), despite its longtime familiarity with Java SE. Tr. 1238:13-19 (Astrachan); Tr. 560:17-

561:4 (Schwartz).

Android solved these problems by making the world's first open-source, vertical full-stack operating system. Tr. 347:14-348:7 (E. Schmidt); Tr. 623:2-21, Tr. 641:18-642:1 (Rubin); TX 1; Tr. 1862:12-17 (Jaffe). Google's task was monumental. Eric Schmidt, Google's CEO at the time of Android's development, testified that it took three years to develop Android after the acquisition because of the "tremendous number of pieces to make the magic happen on these smartphones." Tr. 365:2-6 (E. Schmidt); *see also* Tr. 996:11-997:3 (Bloch). The result of Google's work was a "revolutionary" open-source mobile platform, "completely different from any other approach." Tr. 347:14-348:7 (E. Schmidt); *see also* Tr. 348:21-349:1. Even Oracle's expert, Dr. Jaffe, agreed that it was a "feat" to establish Android as a new, viable mobile platform, a feat that Microsoft, Facebook, Amazon, Sun, and Oracle have all failed to accomplish. Tr. 1784:25-1785:19 (Jaffe).

### b. The mobile platform is a new context with unique challenges and opportunities.

In creating Android, Google incorporated the declarations/SSO of the 37 API packages into an entirely new context. Google witness Dr. Joshua Bloch, who worked at Sun and then at Google as Chief Java Architect, testified that a smartphone is a unique platform very different from the desktops and servers for which Java SE was written. Tr. 996:11-997:3 (Bloch). First, Google selectively used the declarations/SSO of only 37 of the 166 Java SE API packages, rather than the entirety of Java SE. Tr. 1935:6-19 (Astrachan). Second, Google implemented those declarations with code optimized for a mobile platform. *Id.* Dan Bornstein, who was the technical lead for the Android Dalvik Virtual Machine and Android core libraries, explained that Google had to modify the implementing code, since it had been designed for desktop computers and data centers. Tr. 1097:19-1098:11. The new implementations of the Android packages were 80 percent of the size of the SE implementations. Tr. 1235:10-16 (Astrachan).

Google also combined the declarations/SSO with new Google-created or open-source libraries designed for a mobile platform, including for web browsing, location awareness,

<sup>&</sup>lt;sup>2</sup> Google filed all trial exhibits cited herein with its opposition to Oracle's Rule 50(a) motion. *See* Dkt. 1935-1, Decl. of Kate Lazarus in support of Google's Opp. to Oracle's Rule 50(a) Motion.

accelerometers, and cameras. Tr. 1227:14-1228: 22 (Astrachan); Tr. 672:15-673:7 (Rubin). Mr.
Rubin and Mr. Bornstein testified that Google integrated open-source libraries written for mobile
devices specifically. Tr. 669:6-9 (Rubin); Tr. 1109:7-15 (Bornstein); see also Tr. 1229:15-1230:7
(Astrachan); Tr. 1602:10-18 (D. Schmidt). Android also has an application framework layer,
which includes a graphical user interface, telephony services, a camera, multimedia, application
frameworks, application distribution, an activity manager, and a location manager. Tr. 1604:4-
1605:16 (D. Schmidt). In addition, Google built the Dalvik Virtual Machine runtime, which was
also optimized for the constraints of a mobile platform. Tr. 1235:24-1236:13 (Astrachan).
Google built all of this on top of an enhanced version of the open-source Linux kernel, with
Android-specific features. Tr. 1227:14-19 (Astrachan); Tr. 1599:5-1602:9 (D. Schmidt).
Not including the Linux kernel, the resulting platform amounted to 15 million lines of

Not including the Linux kernel, the resulting platform amounted to 15 million lines of code. Tr. 1245:4-7 (Astrachan). Oracle's expert Professor Douglas Schmidt testified that this new context of mobile cloud computing is unprecedented, and the greatest evolution he has seen since he became a professor. Tr. 1610:7-1611:15; 1612:4-6 (D. Schmidt); *see also* Tr. 1598:16-20 (Professor Schmidt considers Android "a massive humongoloid thing").

The jury also could have concluded that Google's open-source distribution of Android makes it transformative. *See* Tr. 1231:4-7 (Astrachan). Mr. Rubin testified that he and his team "innovated this model of open source," for which they could "create the perfect operating system and the perfect smartphone, and let the open source adoption spread it across the globe." Tr. 622:8-15 (Rubin). The open sourcing of Android has led to the creation of a broad ecosystem and further innovation. For example, in addition to all the phone manufacturers creating Android devices, other third parties have also used the Android open source code to create their own operating systems: Amazon created the operating system for Kindle Fire based on Android, and WileyFox created handsets running the CyanogenMod operating system, which was based on Android. Tr. 1237:16-1238:12 (Astrachan). This is exactly the type of innovation that fair use is intended to spur. *See, e.g., Sony BMG Music Entm't v. Tenenbaum*, 672 F. Supp. 2d 217, 226 (2009) ("The Act 'encourages others to build freely upon the ideas and information conveyed by a work." (citing *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 349-50 (1991)).

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On the basis of all this evidence, the jury could have reasonably concluded that Android was a new and different product, rejecting Oracle's contention that Android "merely supersedes" the copyrighted work. See Oracle Am., 750 F.3d at 1376 (recognizing that there were "material facts in dispute on the question of whether Google's use is 'transformative'"). Oracle points to no evidence compelling a different result. Oracle argues only that declines in licensing of Java ME (which is not the accused work, and is a different version of Java without all the declarations/SSO at issue) show that Android superseded the copyrighted work, based on a correlation in time rather than evidence of causation. Mot. at 3-5. But Oracle introduced no documentary evidence of lost sales. Instead, Oracle relied solely on witness testimony, and the jury was free to discount the testimony of Oracle's witnesses as many were impeached on this topic (as well as others). For example, Oracle witness Neal Civjan admitted that he left Oracle in February 2011 and did not know how its business had fared since then. Tr. 1659:5-19. Further, Oracle's economic expert testified that he did not review any financial data for the copyrighted work, Java SE. Tr. 1860:19-1861:23 (Jaffe). Additionally, the jury could have concluded that phones like the Danger Hiptop and SavaJe, which contained elements of Java, were not comparable to the smartphones that run Android. Google showed the jury an example of a SavaJe phone, and asked Dr. Jaffe, "this is the SavaJe phone that you and others have said was a great early version of [a] smartphone; right?" He responded, "I never said it was great." Tr. 1788:15-18; TX 5395.

In sum, the Court was correct when it held that "our jury could reasonably have concluded that Google's use of the declaring code and SSO of 37 API packages from the desktop platform work in a full-stack, open-source mobile operating system for smartphones was transformative." Dkt. 1988 at 15.

#### B. Google Acted in Good Faith.

The Ninth Circuit has held that "fair use is appropriate where a 'reasonable copyright owner' would have consented to the use, *i.e.*, where the 'custom or public policy' at the time would have defined the use as reasonable." *Wall Data Inc. v. Los Angeles Cty. Sheriff*, 447 F.3d 769, 778 (9th Cir. 2006). "[N]o Oracle jury argument received more airtime than its argument that Google 'knew' it needed a license and chose in bad faith to 'make enemies' instead," and

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27 28 Oracle's effort to prove bad faith "opened the door for Google to prove good faith." Dkt. 1988 at 3, 4. Oracle argues that if Google "wins' this subcomponent of factor one, it does not support fair use and would only be a neutral non-issue." Mot. at 8. In other words, this factor is "heads I win, tails I don't lose" for Oracle. Not so; "courts may weigh 'the propriety of the defendant's conduct' in the equitable balance of a fair use determination." Fisher v. Dees, 794 F.2d 432, 436-37 (9th Cir. 1986). The jury could have found that balancing to have weighed in Google's favor.

Moreover, the good faith inquiry falls squarely in the jury's province. Sun and Google executives consistently testified that they believed the declarations/SSO of the 37 API packages were free and open to use. Here, the question of good faith turned on an assessment of these witnesses' credibility, and the "credibility of witnesses is a question for the jury" that is unreviewable. United States v. Yossunthorn, 167 F.3d 1267, 1270 (9th Cir. 1999), as amended (Mar. 31, 1999). Thus, to revisit the question of good faith would be to impermissibly encroach on the province of the jury.

To the extent the Court is inclined to review the evidence, it has already held that a good faith determination would have been supported by significant evidence:

Our jury could reasonably have concluded that Google's use of parts of the Java API as an accelerant was undertaken based on a good faith belief that at least the declaring code and SSO were free to use (which it did use), while a license was necessary for the implementing code (which it did not use). Our jury could reasonably have concluded that Google's concern about making an enemy of Sun reflected concern about the parties' business relationship in light of the failed negotiations that would have brought Sun in as a major partner in Android, rather than concerns about litigation.

Dkt. 1988 at 11-12. Google again briefly summarizes the evidence of Google's good faith in using the declarations/SSO of the API packages.

> 1. All of Google's witnesses testified that they believed the declarations/SSO of the API packages were free and open to use.

Google's most senior executives all testified that when they created Android, they believed they were free to use the declarations/SSO of the API packages. Google founder and

For the reasons stated in Google's filings regarding the proposed jury instructions, Google does not concede that "propriety of the accused infringer's conduct or good or bad faith" is a relevant consideration under the first fair use factor. See, e.g., ECF 1743 at 1-4, ECF 1939 at 2.

former CEO Larry Page testified that he understood that "it was established industry practice that
the API, just the headers of those things, could be taken and basically reimplemented very
carefully, not to use any of the existing implementation of those systems. That's been done many,
many times." Tr. 1846:18-22 (Page); see also Tr. 1847:23-24; 1840:4-13 (Page). Dr. Schmidt,
former Sun CTO and then-Google CEO, testified that he understood that it was permissible to use
the Java API packages with new implementing code based on business advice and years' of
industry experience. Tr. 361:24-362:5; see also Tr. 363:7-25 (E. Schmidt). Based on
conversations with then-Sun CEO Jonathan Schwartz, Dr. Schmidt understood that Google's use
of the API packages was permissible from Sun's perspective. Tr. 377:13-378:18 (E. Schmidt).
Mr. Rubin testified that he believed there was no problem with using the declarations based on his
knowledge as a computer scientist, and in particular based on IBM's use of the Apache Harmony
code and another independent implementation called Bouncy Castle—both of which also freely
used the declarations. Tr. 639:2-7; 726:9-727:2; 732:19-733:5 (Rubin); see also TX 2765. Mr.
Bornstein also testified that he believed it was permissible to use the declarations because he had
seen many new implementations that had "inevitably" used the same declarations. Tr. 1088:2-
1089:21 (Bornstein).
Thus, the record is replete with evidence supporting a finding that Android's key players

Thus, the record is replete with evidence supporting a finding that Android's key players held a good faith belief that Google was allowed to use the declarations/SSO. Oracle elicited no testimony to the contrary from anyone who was there at the time. All Oracle can do is point to a few emails regarding the failed negotiations with Sun and a purported sense of urgency in getting Android to market. Mot. at 8-10. Google demonstrated that the negotiations with Sun related to a co-development partnership focused on Sun's implementations of the libraries and virtual machine, and branding and cooperation, not Google's independent implementation of the Java APIs. Tr. 639:22-640:4 (Rubin); 1846:3-1847:3, 1847:23-24 (Page); TX 617. Thus, the jury could reasonably have found that the emails "pertained to earlier negotiations for a joint venture to use the *entire* Java system, including the implementing code, and that, after those discussions failed, Google acted in good faith by duplicating only the declarations to 37 packages to maintain inter-system consistency in usage and by supplying its own implementing code." Dkt. 1988 at

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18. Furthermore, Mr. Rubin explained that he never felt any pressure from Mr. Page to get Android ready, and Mr. Page testified that he did not believe there was some "window" in which Google had to get Android to market. Tr. 762:13-16 (Rubin); Tr. 1845:5-9 (Page).

Accordingly, the jury could have reasonably relied on Google's witnesses' testimony that they believed that they were free to use the declarations/SSO of the 37 API packages.

### 2. Sun's practice was to promote the use and re-use of the "free and open" Java SE APIs.

The jury also could have relied on extensive evidence that prior to its acquisition by Oracle, Sun's policy was that the APIs were free and open for anyone to use. Mr. Schwartz testified that Sun marketed the APIs as free and open and that the Java APIs were never sold or licensed separately from the language during his tenure at Sun. Tr. 501:8-23 (Schwartz). Mr. Schwartz explained that the strategy was "we agree on APIs, on these open APIs; we share them; and then we compete on implementations." Tr. 500:21-23 (Schwartz). Dr. Bloch, who was a Sun Distinguished Engineer, testified that while he was at Sun, he hoped other programmers would create independent implementations of Java APIs because that would be "the mark of a successful API." Tr. 974:9-21 (Bloch). Dr. Bloch did "everything in [his] power" to promote adoption of the APIs, and he always believed that engineers were "free to re-implement each other's APIs." Tr. 994:10-11; Tr. 974:9-21 (Bloch). Moreover, Sun re-implemented APIs of others in creating the Java APIs themselves: for example, Dr. Bloch testified that Sun implemented a Perl 5 API without asking for permission in order to take advantage of programmers' familiarity with it. Tr. 991:18-992:2; Tr. 994:6-11 (Bloch). Dr. Schmidt also offered an example from his tenure at Sun of the company implementing interfaces from Windows to build its own Windows implementation ("WABI") without a license. Tr. 362:22-363:6 (E. Schmidt).

### 3. Sun knew about Android's use of the API packages and welcomed Google into the Java community.

The jury also heard uncontradicted evidence that Sun knew about and welcomed Google's implementation of the Java API packages. Dr. Schmidt testified that he told Mr. Schwartz the details about Android, which included the use of the API packages. Tr. 364:8-15 (E. Schmidt). Sun Vice President Alan Brenner testified that he thought Google would do an independent

implementation of the API packages. Tr. 1690:10-1691:5 (Brenner). After the Android announcement, Mr. Schwartz wrote on his blog, "I just wanted to add my voice to the chorus of others from Sun in offering my heartfelt congratulations to Google on the announcement of their new Java/Linux phone platform, Android. Congratulations!" TX 2352; Tr. 539:4-20 (Schwartz). He added that Google had "strapped another set of rockets to the community's momentum." TX 2352. When Dr. Schmidt read the post, he understood that Google and Sun together were going to "grow this ecosystem bigger and bigger as a result of the Open Handset Alliance." Tr. 369:2-12 (E. Schmidt). Mr. Rubin saw the post as a "thrilling" sign of Sun's support. Tr. 743:13-24 (Rubin).

Privately, Mr. Schwartz also expressed Sun's support for Android in several emails to Dr. Schmidt. TX 5987; TX 3441. Dr. Schmidt and Mr. Schwartz both testified that they continued to talk through Android's release, and that Mr. Schwartz never expressed disapproval or stated that Google needed a license. Tr. 377:13-378:18 (E. Schmidt); Tr. 556:23-557:5, 558:8-11 (Schwartz). Sun's head of strategy and business development for Java visited Mr. Rubin, and indicated Sun's support for Android. Tr. 744:7-745:13 (Rubin). And, after Oracle announced its acquisition of Sun, it also publicly embraced Android, with Oracle CEO Larry Ellison stating at JavaOne: "There are going to be Netbooks based on Android and I think we can see lots and lots of Java devices, some coming from our friends at Google." TX 2939.1; Tr. 1384:1-17 (Catz); see also TX 7406 (presentation for meeting with Ellison and Schmidt).

### 4. GNU, Apache, and others show a custom of creating independent implementations of APIs, and Sun knew about this industry practice.

As the Court has explained, the instructions "allowed the jury to consider, in evaluating good faith or not, together with all other circumstances, the extent to which Google's conduct followed or contravened any recognized practice in the industry." Dkt. 1988 at 4-5. Consistent with this instruction, Google introduced evidence of a practice of creating independent implementations of the Java API packages, and that Sun was aware of the practice. Mr. Schwartz testified that Sun believed that the independent implementations GNU (Classpath) and Apache (Harmony) were fair and consistent with Sun's business practices. Tr. 508:22-509:9; 515:18-24,

517:2-16, 520:15-521:3 (Schwartz). Simon Phipps, Sun's former Chief Open Source officer, testified that Sun was "well aware" of the Harmony and Classpath implementations, and never told Apache or GNU to stop distributing their code. Tr. 1037:6-14; 1024:17-1028:7 (Phipps); TX 7578; *see also* Tr. 1023:3-1027:17; TX 7722. Similarly, while at Sun, Dr. Bloch assisted GNU Classpath engineers in their independent implementation. Tr. 989:15-990:7; 990:18-991:17 (Bloch). Dr. Bloch's boss knew he was supporting GNU, and Dr. Bloch was not aware of anyone at Sun suggesting that GNU's independent implementation was not acceptable. *Id.* Finally, John Duimovich, Java Chief Technology Officer at IBM, testified that IBM used Apache Harmony code in its commercial products, and Mr. Phipps informed his Sun colleagues about IBM's contribution to Harmony. Tr. 952:18-19 (Duimovich Depo. at 51:15-52:1); TX 7326 at 4; TX 7578. The jury could have found that these independent implementations of Java SE API packages, done with Sun's knowledge, constitute a common industry practice.

The Court should thus again reject Oracle's meritless contention that a reasonable jury could not have concluded Google acted in good faith. "Mental state was and remains a classic province of the jury." Dkt. 1988 at 12. The jury's credibility determination cannot be revisited, and a finding of good faith is supported by ample evidence.

### III. A REASONABLE JURY COULD FIND THAT THE DECLARATIONS/SSO OF THE 37 API PACKAGES ARE HIGHLY FUNCTIONAL.

The Court correctly determined that the jury reasonably could have "concluded that the declaring code was not highly creative." Dkt. 1988 at 16. "Under the Copyright Act, if a work is largely functional, it receives only weak protection." *Sega*, 977 F.2d at 1527. This is particularly true when the works are "dictated by the function to be performed, by considerations of efficiency, or by external factors such as compatibility requirements and industry demands." *Id.* (citations omitted). Thus, "the fair use doctrine preserves public access to the ideas and functional elements embedded in copyrighted computer software programs." *Sony Computer Entm't v. Connectix Corp.*, 203 F.3d 596, 603 (9th Cir. 2000). While Google accepted, for purposes of this trial, that the declarations/SSO of the Java SE API packages are sufficiently original to meet the minimum threshold for copyrightability, the evidence was more than enough for the jury to find that Google's use of the declarations/SSO of the 37 API packages was "not

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highly creative, was mainly functional, and was less deserving of protection." Dkt. 1988 at 18.<sup>4</sup>

Dr. Astrachan testified about the functional nature of the declarations/SSO. As an initial matter, Dr. Astrachan testified that because the SSO is reflected by the names of the declarations, they are equivalent for purposes of understanding functionality. Tr. 1928:23-1929:2 (Astrachan). Dr. Astrachan further explained that the declarations are short, descriptive, and serve one function: to provide a connection to the libraries. Tr. 1239:18-25, 1241:12-16, 1243:2-14 (Astrachan). As an example, Dr. Astrachan reviewed the method declaration for the Authenticator class in the java.net package, with which he had not been previously familiar, and explained that he could understand what the "method would do based simply on its names and its inputs and outputs." Tr. 1925:15-1927:9 (Astrachan). Further, because of the limitations on how declarations can be written, there are similarities between the names in Java and other languages. Tr. 1243:2-1244:9 (Astrachan); see also Tr. 962:2-16 (Bloch); TX 980 at 18 (Java Application Programming Interface, Vol. 1: "[f]irst and foremost, the API should be simple and easy to use.").

Mr. Schwartz, Dr. Bloch, and Mr. Bornstein also all testified that the declarations/SSO are a set of functional instructions. As Mr. Schwartz testified, the declarations are like names of dishes on a menu, e.g., the word "hamburger." Tr. 502:11-503:20 (Schwartz). Dr. Bloch explained that a computer language has a certain set of rules and "is completely inflexible." Tr. 964:18-23 (Bloch). Dr. Bloch further testified that declarations should be "as short as possible but no shorter," providing only "the tools that the programmer needs to get the work done but nothing beyond . . . ." Tr. 971:8-20 (Bloch); see also Tr. 1080:24-1082:8 (Bornstein). In contrast, there is much more flexibility in writing implementations; that's where a programmer's "experience and taste" come into play. Tr. 1087:18-1088:1 (Bornstein).

By contrast, the record is devoid of evidence showing that the declarations/SSO of the 37 API packages contain any degree of original expression beyond the minimal amount necessary to qualify for copyright protection. Instead, Oracle points to evidence that the process of designing APIs is a "noble and rewarding craft," and emphasizes Oracle's investment in creating the Java

Google does not waive and hereby expressly preserves its position that the SSO/declarations are not eligible for protection under copyright law. See, e.g., Bikram's Yoga Coll. of India, L.P. v. Evolation Yoga, LLC, 803 F.3d 1032 (9th Cir. 2015).

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SE platform. Mot. at 11-13. That is not the proper test under factor two. The Supreme Court has squarely rejected the very "sweat of the brow" theory of creativity on which Oracle relies. See Feist, 499 U.S. at 359-60.

Oracle also wrongly argues that choices about which classes and methods to include in the packages and how to order them constitute creative expression. Mot. at 12-13. The Ninth Circuit has held that these kinds of selection and arrangement decisions do not establish creativity. See Bikram's Yoga Coll. of India, 803 F.3d at 1042. In a case about a yoga routine, the court rejected the argument that the work was copyrightable because the plaintiff "could have chosen from 'hundreds of postures' and 'countless arrangements of these postures' in developing the Sequence." Id. The court concluded that "though it may be one of many possible yoga sequences capable of attaining similar results, the Sequence is nevertheless a process and is therefore ineligible for copyright protection." Id. Thus, the possibility that the 37 API packages could have been written and ordered in different ways and "still achieved the same functions" does not even tend to establish copyrightability, let alone require judgment for Oracle under the higher creativity standard for fair use.

The testimony of Dr. Astrachan, Mr. Schwartz, Dr. Bloch, and Mr. Bornstein was sufficient for the jury to conclude that "while the declaring code and SSO were creative enough to qualify for copyright protection, functional considerations predominated in their design, and thus Factor Two was not a strong factor in favor of Oracle after all." Dkt. 1988 at 16.

#### IV. A REASONABLE JURY COULD FIND THAT THE AMOUNT AND SUBSTANTIALITY OF THE PORTIONS OF JAVA SE USED BY GOOGLE **FAVOR FAIR USE.**

The Ninth Circuit has stated that while "wholesale copying does not preclude fair use per se, copying an entire work militates against a finding of fair use." Worldwide Church, 227 F.3d at 1118. Here, Google did not even come close to copying the entire copyrighted work. To the contrary, the jury could reasonably have found that Google used the "bare minimum" of the copyrighted work, "just enough to preserve inter-system consistency in usage, namely the declarations and their SSO only, and did not copy any of the implementing code, thus finding that Google copied only so much as was reasonably necessary for a transformative use." Dkt. 1988 at 17.

Once again, Oracle wrongly claims that a factor can only help Oracle, and never hurt it, this time contending that "the substantiality of the copying does not support fair use; it just does not weigh against it." Mot. at 14. To the contrary, the Ninth Circuit has repeatedly found that factor three can *favor* a finding of fair use. *See, e.g., Mattel, Inc. v. Walking Mountain Prods.*, 353 F.3d 792, 804 (9th Cir. 2003) (extent of copying was justifiable and "this factor also weighs in his favor."); *Sony Computer Entm't Am., Inc. v. Bleem, LLC*, 214 F.3d 1022, 1028-29 (9th Cir. 2000), *amended on denial of reh'g* (July 10, 2000) ("Here, too, it seems clear that the third factor supports a finding of fair use.").

Here, the jury had ample basis to conclude that the amount and substantiality of Google's use favored fair use. As a quantitative matter, "the number of lines of code duplicated constituted a tiny fraction of one percent of the copyrighted works (and even less of Android, for that matter.)" Dkt. 1988 at 17. Per the parties' stipulation, which was read to the jury, Android includes approximately 11,500 lines of declaring code from Java SE. Tr. 1493:8-1494:16; ECF 1901. Compared to the 2.86 million lines of code in the Java SE class libraries and the approximately 5 million lines of code in Java SE as a whole, the percentages of overlapping declaring code are minuscule—0.40% or 0.23%, respectively. Tr. 1244:21-1245:3 (Astrachan). Oracle argues without citation to authority that the number of lines of code should be considered independently of the size of the copyrighted work, but the jury was free to disagree.

Furthermore, the finder of fact must consider "whether the amount of the work used was 'reasonable in relation to the purpose of the copying." *Morris v. Young*, 925 F. Supp. 2d 1078, 1087 (C.D. Cal. 2013) (citing *Campbell*, 510 U.S. at 586). Google's inclusion of the declarations (and their associated SSO) was for the benefit of developers, who would expect to be able to use all of the 37 API packages in order to make effective use of the language that they were taught as a free language. Tr. 983:21-984:1 (Bloch discussing Section 1.3 in TX 984); Tr. 987:17-989:2 (Bloch discussing TX 4027). Dr. Astrachan explained that "developers . . . would expect that if you're going to be using the Java programming language, that you have access to a rich suite of APIs, both the declarations and the libraries." Tr. 1262:6-9 (Astrachan); *see also* Tr. 1262:3-

1263:3 (Astrachan). Given the underlying purpose—the portability of programming knowledge between platforms—this evidence strongly supports fair use. Google used only that portion of the work that would allow developers to rely on their familiarity with the Java language and otherwise created an independent implementation.<sup>5</sup>

As a qualitative matter, Oracle's senior Java architect, Dr. Mark Reinhold, agreed that the declaring code is no more substantial than the implementing code. Tr. 1475:11-15 (Reinhold). Because it is the implementations that actually carry out the functionality called by the declaring code, the jury could have reasonably concluded that the declarations are relatively less important. Tr. 996:11-997:14 (Bloch); Tr. 1234:8-1235:23 (Astrachan). Moreover, there is no allegation that Google used contiguous lines of code that implement any important functionality (akin, for example, to the 300-word quote at issue in *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539 (1985)). To the contrary, the evidence shows that Google used only the labels that can be used to access the underlying implementing code, which Google wrote itself.

Accordingly, the jury reasonably could have found that Google copied only a "tiny fraction" of the copyrighted work only as much as "was necessary to maintain inter-system consistency among Java users," and that this factor favors fair use. Dkt. 1988 at 10, 18-19.

# V. A REASONABLE JURY COULD FIND THAT GOOGLE'S USE OF THE DECLARATIONS/SSO DID NOT AFFECT THE ACTUAL OR POTENTIAL MARKET FOR JAVA SE.

The fourth factor requires considering the "effect of the use on the potential market for or value for the copyrighted work." 17 U.S.C. § 107(4). Where, as here, a defendant makes transformative use of only a portion of the copyrighted work, substitution is "less certain, and market harm may not be so readily inferred." *Campbell*, 510 U.S. at 591. Moreover, harm that may result from losing "control over [a] market"—*i.e.*, through the introduction of a legitimately competing platform that does not "supplant" the original work—does not constitute cognizable "market harm." *Sony*, 203 F.3d at 607-608 (citing *Sega*, 977 F.2d at 1523-24). On this factor, the

Oracle argues that the Supreme Court's consideration in *Campbell* of the quantity of material used in relation to purpose of the use is irrelevant because that case involved parody. Mot. at 16. But the Supreme Court did not so limit its analysis, and courts have considered the relation of the use to the purpose in contexts other than parody. *See, e.g., Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 821 (9th Cir. 2003) (amount of images used was necessary for purposes of search engine).

"jury could have found that Android caused no harm to the desktop market for the copyrighted works or to any mobile derivative, as borne out by Sun's own records." Dkt. 1988 at 19.

### A. There is no evidence that Google's use of the declarations/SSO of the 37 API packages in Android has caused any actual harm to the copyrighted work.

The copyrighted work at issue, Java SE, is designed and licensed for use on desktops and servers, Tr. 1859:23-1860:6 (Jaffe), and the jury heard undisputed evidence that Oracle continues to successfully license Java SE in these markets. Tr. 1860:7-10 (Jaffe); *see also* TX 7787 (Ellison 8/12/2011 Depo. at 151:10-152:1). Oracle's 30(b)(6) witness Donald Smith testified that, as of November 2015, Oracle's Java SE business was still "growing well." TX 7788 (Smith 11/20/15 Depo. at 277:24-278:7). And Dr. Jaffe conceded that he had *conducted no analysis whatsoever* regarding actual revenues for Java SE. Tr. 1860:19-24, 1861:10-23. Oracle points to Oracle CEO Safra Catz's testimony that Amazon switched to Android for the Kindle Fire because it was free, but the jury heard that Java SE was *also* free, via OpenJDK. Tr. 1019:15-17. Accordingly, the jury reasonably could have discounted Ms. Catz's testimony about Amazon's decision. Tr. 1359:22-24 (Catz). In short, the "jury could reasonably have found that use of the declaring lines of code (including their SSO) in Android caused no harm to the market for the copyrighted works, which were for desktop and laptop computers." Dkt. 1988 at 17.

### B. A reasonable jury may have disregarded alleged harm to Java ME, because there is no evidence that Java ME is a derivative work of Java SE.

Having abandoned any claim of harm to the copyrighted work, at trial Oracle focused almost exclusively on alleged harm to Java ME, which Oracle claimed was a derivative work of Java SE. However, a reasonable jury was not compelled to find that Java ME is a derivative work based on any asserted version of Java SE. In order to qualify as a "derivative work" of an original copyrighted work, the work in question "must substantially incorporate protected material from the preexisting work." *Micro Star v. Formgen Inc.*, 154 F.3d 1107, 1110 (9th Cir. 1998). The two asserted works, Java SE 1.4 and Java SE 5, were released in February 2002 and September 2004, respectively. Sun's former head of Java ME licensing, Alan Brenner, testified that Java ME was created in September 2000—*two years prior to the earliest copyrighted work at issue*. Tr. 1668:13-19 (Brenner). Mr. Brenner likewise testified that he could not identify any

protectable expression incorporated from the asserted copyrighted works into any post-2002

versions of Java ME. Tr. 1691:22-1692:11 (Brenner). Because the original version of Java ME

pre-dates the asserted versions of Java SE, and Oracle did not show that later versions of Java ME

incorporated substantial portions of the declarations/SSO at issue from the Java SE platform after

2002, a reasonable jury could have concluded that Java ME does not qualify as a derivative work

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of Java 2 SE 1.4 and Java 2 SE 5.0.

### C. Android is not a market substitute for the copyrighted work.

A reasonable jury also could have found that Android and Java SE and ME did not compete in the same market. Because Android was highly transformative, the jury could have concluded that Android was not a substitute for the Java SE platform, and could not have had a cognizable adverse impact on the market for the copyrighted work. *Authors Guild v. HathiTrust*, 755 F.3d 87, 99 (2d Cir. 2014). As noted above, Java SE is designed for use on desktops and servers, and was never adapted for mobile devices. TX 7803 (Stahl 1/14/16 Depo. at 148:25-149:7); Tr. 917:17-23 (Rubin); Tr. 581:15-21 (Schwartz). As Google's expert Dr. Gregory Leonard testified, Android and Java SE are not market substitutes, but rather, they are "very different types of products." Tr. 1897:18-1898:10 (Leonard).

In addition, the jury could have concluded that Android does not threaten any valid "potential market" for the copyrighted work, as Sun and Oracle witnesses conceded that the modern smartphone market is not a "traditional, reasonable, or likely to be developed market" for Java SE. *Seltzer v. Green Day, Inc.*, 725 F.3d 1170, 1179 (9th Cir. 2013). Mr. Schwartz testified that Java SE was not intended to be licensed for use on mobile phones. *See, e.g.*, Tr. 581:11-14 (Schwartz). Craig Gering, former head of engineering for Sun's Java licensing organization, testified that Sun "never brought a full-stack mobile operating platform to market" with Java SE despite many efforts to do so—even before Android came on the scene. Tr. 1194:12-1195:19 (Gering); *see also* Tr. 560:25-561:4 (Schwartz); Tr. 1198:9-1200:1 (Gering); Tr. 1704:3-17 (Brenner); Tr. 1799:15 (Jaffe); Tr. 1799:20-1800:16 (Jaffe); Tr. 1864:23-1865:8 (Jaffe); TX

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Oracle's expert also admitted that Java ME only has around 10-12 API packages, as compared to the 166 API packages in Java SE. Tr. 1795:8-21 (Jaffe).

out to be a failure, also before Android was released. Tr. 1864:23-1865:5 (Jaffe). As Mr. Schwartz testified, Sun's failure to build its own Java-based smartphone platform was in no way attributable to Android. Tr. 562:10-12 (Schwartz).

Java ME was also not suitable for smartphones. Oracle's Vice President of Product

7362; TX 2052. The only phone that Oracle identified as having used Java SE, SavaJe, turned

Management, Henrik Stahl, testified that Java ME does not "provide[] the features and functionality needed for a modern smartphone." TX 7803 (Stahl 3/31/16 Depo. at 59:17-25); *see also* TX 7804 (Rizvi 7/28/11 Depo. at 203:4-7); Tr. 1899:16-1900:11 (Leonard). As early as September 29, 2006—over a year before Android was released—Sun acknowledged that it was ill-prepared for the shift to the market for modern smartphones. TX 7237 at 3, 5. Similarly, in a 2009 presentation, Sun acknowledged that modern smartphone operating systems, like iOS and Android, are in a different market than Java ME or any other Java platform. *See* TX 2052 at 16. The jury could have reasonably found that "Android had no further negative impact on Java ME beyond the tailspin already predicted within Sun." Dkt. 1988 at 17.

The evidence showed that Android devices constitute a different category from devices running either Java SE or Java ME. *See* Tr. 1898:15-22 (Leonard). As Dr. Leonard testified, Android's success in the marketplace is attributable to its execution of the advanced features and functionality associated with the modern smartphone, not Google's use of the declarations/SSO from Java SE. Tr. 1904:5-1905:7 (Leonard). In view of this evidence, the jury did not have to agree with Oracle that Java SE competes with, or has the potential to compete with, Android in the modern smartphone platform market.

## D. Google's use of the declarations/SSO of the 37 API packages in Android was consistent with Sun's own business practices.

The jury also could have reasonably rejected Oracle's claim that Android's use of the 37 API packages has harmed, or may cause harm to, the market for Java SE through other means, such as through "fragmentation." Mr. Schwartz testified that Sun had always treated the declarations/SSO as free and open because Sun's business strategy was to "compete on implementations" and drive the sale of hardware and services. Tr. 501:8-23; Tr. 610:6-11

(Schwartz); *see also* Tr. 341:1-9 (E. Schmidt); TX 2041 at 10; TX 7275; Tr. 1022:16-19 (Phipps); Tr. 1874:18-1875:18 (Jaffe). As a result, Mr. Schwartz testified that Sun limited its licensing to its own proprietary implementations of Java SE, and if a third-party implementation of the declarations/SSO did not brand itself "Java," such conduct was consistent with Sun's business practices. *See* Tr. 501:20-23; Tr. 508:25-509:3 (Schwartz). Android was not called "Java." Tr. 657:19-23 (Rubin). As a result, consistent with Sun's own business practices, Google did not need to be compatible and take a license from Sun for that purpose. Tr. 596:10-14 (Schwartz).

For similar reasons, Android's use of the declarations/SSO has not harmed the market for Java SE through fragmentation. As Mr. Schwartz acknowledged, because Android does not call itself "Java," Android cannot fragment (*i.e.*, "fork") Java SE. TX 1055 at 1. Moreover, by the time Android was released, Sun was acknowledging that Java had already been "[f]ragmented between Java SE and Java ME" and as between other editions of Java. TX 3508 at 3; *see also* Tr. 558:17-23 (Schwartz). And in May 2007, prior to Android's release, Sun/Oracle made available without charge a version of the Java SE platform called OpenJDK, and any third party was and is free to use any portion of the OpenJDK platform, provided it does not call itself "Java." Tr. 1020:24-1021:4 (Phipps); Tr. 558:12-14 (Schwartz); TX 7722 at 13; *see also* 1066:8-14 (Phipps); TX 7722 at 9; Tr. 559:2-17 (Schwartz); Tr. 735:15-736:2 (Rubin); TX 971 at 3. In other words, Android could not have harmed Java SE through fragmentation because Sun had already fragmented Java SE. *See* Dkt. 1988 at 17 ("our jury could reasonably have found that Android's impact on the market for the copyrighted works paralleled what Sun already expected via its OpenJDK.").

### E. Oracle's argument regarding the market for developers is procedurally improper and incorrect.

Oracle also contends that it experienced harm in the market for Java developers. Mot. at 24. But Oracle waived this argument by not raising it in its Rule 50(a) motion. *See* Dkt. 1914 at 20-23. "[A] proper post-verdict Rule 50(b) motion is limited to the grounds asserted in the predeliberation Rule 50(a) motion." *E.E.O.C. v. Go Daddy Software, Inc.*, 581 F.3d 951, 961 (9th

<sup>&</sup>lt;sup>7</sup> In its Rule 50(a) motion, Oracle referenced the market for developers in connection with factor three, but Oracle did *not* argue that Android has hurt Oracle in this "market." Dkt. 1914 at 19.

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Cir. 2009). A party cannot raise arguments in its motion under "Rule 50(b) that it did not raise in its preverdict Rule 50(a) motion." *Id.* (quotation marks omitted).

The argument also fails on the merits. First, Oracle assumes that developers write for only one platform, but this assumption is contradicted by the record. Dr. Astrachan testified that it is straightforward for programmers to learn multiple languages, and Mr. Rubin and Mr. Bornstein both testified that they know how to program in a variety of languages. See Tr. 1213:13-1214:2 (Astrachan); Tr. 618:17-619:1, Tr. 632:6-16 (Rubin); Tr. 1072:21-1073:4 (Bornstein). Second, there was evidence that Android actually helped *grow* the number of Java developers. Mr. Schwartz testified that Sun wanted Google to use Java to keep it "relevant," and stated publicly that Android strapped "rockets" on Java. Tr. 522:6-8 (Schwartz); TX 2352. Dr. Astrachan testified that Java is still the number one programming language in the world, and that the presence of Android has helped to maintain the popularity of the language. Tr. 1245:8-21; 1252:22-24 (Astrachan); see also TX 7788 (Smith 11/20/15 Depo. testimony that there are currently more than 10 million Java programmers, and the number has increased over time). Third, to the extent Oracle claims it was harmed because of differences between the Android platform and Java SE, Sun/Oracle invited exactly this kind of differentiation when it introduced OpenJDK. See Tr. 1028:8-1029:25 (Phipps). Accordingly, the jury could have reasonably concluded that any changes in the "developer market" do not weigh in Oracle's favor.

#### F. Oracle has waived its meritless argument that widespread conduct like Google's would put Oracle out of business.

Oracle also contends for the first time that the jury was compelled to find fair use because Ms. Catz testified that Oracle "wouldn't have a business" if everyone engaged in conduct like Google's. Again, Oracle waived this argument by not including it in its Rule 50(a) motion. See Go Daddy, 581 F.3d at 961. Moreover, the jury certainly could have disagreed with Ms. Catz on this point. The jury might have reasonably concluded that even if everyone did what Google did —i.e. reimplement less than 1% of the copyrighted work, write their own optimized implementing code, write new libraries for the mobile environment, add an application framework layer, build a customized virtual machine, deploy an enhanced version of Linux, and

make the resulting platform open-source—Oracle would still be in business. Further, the jury might have concluded that Google's actions were consistent with Sun's own strategy of encouraging the use of Java in order to promote other parts of Sun's business. *See* Tr. 501:8-23; Tr. 610:6-11 (Schwartz).

#### VI. ADDITIONAL FAIR USE CONSIDERATIONS

Section 107 lists four factors the courts "shall" consider in determining whether use of a copyrighted work is a "fair use," but these statutory factors are "not exclusive." *Sega*, 977 F.2d at 1522. "Rather, the doctrine of fair use is in essence 'an equitable rule of reason." *Id.* (quoting *Harper & Row*, 471 U.S. at 560). At least two other considerations could support the jury's fair use verdict.

#### A. Google's use promotes the purposes of copyright.

The fair use inquiry weighs the strength of each factor relative to other factors "in light of the purposes of copyright." *Campbell*, 510 U.S. at 578. In this case, there was substantial evidence enabling the jury to find that Google's use of the declarations/SSO of the 37 API packages at issue serves the overall purpose of copyright: to "promote the Progress of Science and the useful Arts . . . ." U.S. Const., Art. I, § 8, cl. 8.

The jury could have found, for example, that "avoiding cross-system babel promoted the progress of science and useful arts." Dkt. 1988 at 10. The jury might "reasonably have given weight to the fact that cross-system confusion would have resulted had Google scrambled the SSO and specifications." *Id.* at 18. "Java programmers and science and the useful arts were better served by a common set of command-type statements, just as all typists are better served by a common QWERTY keyboard." *Id.* As noted above, Dr. Astrachan and Dr. Bloch testified that the declarations/SSO chosen by Google are those that Java developers would expect to make meaningful use of the Java programming language. *See* Section III, *supra*. The jury could have considered such interoperability and lock-in concerns in concluding that Google's use of the declarations/SSO in the 37 API packages was a fair use. Br. for the U.S. as Amicus Curiae at 17, *Google, Inc. v. Oracle Am., Inc.*, No. 14-410.

Further, the evidence showed that Google's transformative use of the declarations/SSO in

the 37 API packages has been a boon for the Java programming language, the mobile industry, and the public. As Oracle's former Senior Principal Technologist and Product Manager, Terrance Barr, testified, "Android was a part of [the] transformation" in the mobile phone industry, TX 7805 (Barr 12/9/2015 Depo. at 134:18-19), a transition that Oracle's expert described as the greatest evolution he had seen in computing since becoming a professor. Tr. 1610:8-16 (D. Schmidt). Mr. Stahl likewise testified that he believed "the existence of Android is a positive for the mobile phone market." TX 7803 (Stahl 3/31/16 Depo. at 40:21-41:3). This evidence tends to support a fair use finding.

### B. Oracle admits that the Java programming language is free to use and that at least some of the classes are necessary to use the language.

The jury also could have considered evidence showing that it is not possible to readily identify the technically necessary lines of declaring code of the Java APIs, which Oracle admits is free to use. The jury heard that at least 170 lines of declaring code from 62 classes and interfaces in the 37 API packages are *technically necessary* in order to use the free Java programming language, and that Google's use of the declaring code listed in Trial Exhibit 9223 was a fair use. Tr. 1445:16-23; *see also* TX 9223. But the jury heard no evidence explaining *why* the 170 lines of declaring code identified in TX 9223 are technically necessary. Dr. Mark Reinhold testified that he performed an undescribed "analysis" based on his review of the Java Language Specification, but did not explain *how* he performed this analysis, or *what* in the Java Language Specification allowed him to reach these conclusions. Tr. 1463:8-15; Tr. 1464:10-25.

Dr. Reinhold *did* testify, however, that his initial conclusions were incomplete. He testified that in response to Dr. Astrachan's critique, he "redid" his analysis and concluded that he had erroneously omitted sixteen lines of technically necessary declaring code. *See* Tr. 1463:16-1464:3. Similarly, Professor Schmidt testified that he had independently reviewed Dr. Reinhold's prior analysis and missed the same sixteen lines. Tr. 1553:13-1554:6. The evidence thus showed that even the Chief Architect of the Java Platform Group (Tr. 1447:1-2) came up with different answers in attempting to determine the lines of declaring code that are technically necessary to use the language (and thus wholly free to use), and Oracle's technical expert repeated the same

error.

The jury also heard several witnesses testify that the 37 API packages used in Android were important for making effective use of the language. Mr. Bornstein testified that he and his team chose the Java SE API packages that "made sense" based on the needs of a smartphone platform. *See* Tr. 1104:19-1106:12. Dr. Astrachan testified that the 37 API packages are "the ones that would be useful" when programming for a smartphone platform and that developers would expect these APIs to be available. Tr. 1234:10-11; 1262:3-1263:3. Further, Oracle witness Donald Smith testified that the 37 API packages "are a fundamental part of what makes Java Java—what makes a developer recognize Java." TX 7812 (Smith Depo. at 22:16-23:2). Professor Schmidt testified that the classes and interfaces in the Java SE API packages "are not islands," and instead are "actually connected together in a very intricate web of relationships." Tr. 1519:20-24; *see also* TX 5399 at 356 (demonstrative).

In any case, the fair use doctrine is an "equitable rule of reason," *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 448 (1984), and is not limited to uses that are technically necessary. Rather, the fact finder is "free to adapt the doctrine to particular situations on a case-by-case basis" and this is especially so "during a period of rapid technological change." *Id.* Because it was indisputably fair use for Google to use at least some subset of the asserted declarations and SSO of the 37 Java SE API packages, the jury could have concluded that Google's use of *all* of the asserted declarations and SSO was a fair use.

#### VII. CONCLUSION

For the reasons stated above and in the Court's order denying Oracle's Rule 50(a) motion, Google requests that the Court deny Oracle's renewed motion for judgment as a matter of law.

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### Dated: July 20, 2016 KEKER & VAN NEST LLP By: /s/ Robert A. Van Nest ROBERT A. VAN NEST CHRISTA M. ANDERSON DANIEL PURCELL Attorneys for Defendant GOOGLE INC. GOOGLE'S OPP TO ORACLE'S RULE 50(B) MOTION FOR JUDGMENT AS A MATTER OF LAW

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